

ABSTRACT

The invention provides a method for polishing a substrate comprising a metal in an oxidized form, the method comprising the steps of: (a) providing a substrate comprising a metal in an oxidized form, (b) contacting a portion of the substrate with a chemical-mechanical polishing system comprising: (i) a polishing component, (ii) a reducing agent, and (iii) a liquid carrier, and (c) abrading at least a portion of the metal in an oxidized form to polish the substrate. The reducing agent can be selected from the group consisting of 3-hydroxy-4-pyrones, α -hydroxy- γ -butyrolactones, ascorbic acid, borane, borohydrides, dialkylamine boranes, formaldehyde, formic acid, hydrogen, hydroquinones, hydroxylamine, hypophosphorous acid, phosphorous acid, a metal or metal ions in an oxidation state having a standard redox potential that is less than the standard redox potential of the metal in an oxidized form, trihydroxybenzenes, solvated electrons, sulfurous acid, salts thereof, and mixtures thereof.